## PATENT COOPERATION TREATY

From the INTERNATIONAL SEARCHING AUTHORITY	PCT   10038					
Los Angeles, California 90025 UNITED STATES OF AMERICA PLAKELY SOKOLOF	NOTIFICATION OF TRANSMITTAL OF THE INTERNATIONAL SEARCH REPORT OR THE DECLARATION  1 5 2004 (PCT Rule 44.1)  TAYLOR & ZAFMAN LLP ANGELES					
	Date of mailing (day/month/year) 26/07/2002					
Applicant's or agent's file reference 42390.10038PCT	FOR FURTHER ACTION See paragraphs 1 and 4 below					
International application No.  PCT/US 02/04217  Applicant  APR - 6 2004	International filing date (day/month/year) 11/02/2002					
INTEL CORPORATION STATUS DB-LA	NO DOCKETHIS RECURRED AD PETIPOS					
The applicant is hereby notified that the International Search Report has been established and is transmitted herewith.  Filing of amendments and statement under Article 19: The applicant is entitled, if he so wishes, to amend the claims of the International Application (see Rule 46):  When? The time limit for filing such amendments is normally 2 months from the date of transmittal of the International Search Report; however, for more details, see the notes on the accompanying sheet.  Where? Directly to the International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland Fascimile No.: (41-22) 740.14.35						
For more detailed instructions, see the notes on the accompanying sheet.  2. The applicant is hereby notified that no International Search Report will be established and that the declaration under Article 17(2)(a) to that effect is transmitted herewith.						
3. With regard to the protest against payment of (an) additional fee(s) under Rule 40.2, the applicant is notified that:  the protest together with the decision thereon has been transmitted to the International Bureau together with the applicant's request to forward the texts of both the protest and the decision thereon to the designated Offices.  no decision has been made yet on the protest; the applicant will be notified as soon as a decision is made.						
4. Further action(s): The applicant is reminded of the following:  Shortly after 18 months from the priority date, the international application will be published by the International Bureau. If the applicant wishes to avoid or postpone publication, a notice of withdrawal of the international application, or of the priority claim, must reach the International Bureau as provided in Rules 90bis.1 and 90bis.3, respectively, before the completion of the technical preparations for international publication.  Within 19 months from the priority date, a demand for international preliminary examination must be filled if the applicant						
wishes to postpone the entry into the national phase until 30 months from the priority date (in some Offices even later).  Within 20 months from the priority date, the applicant must perform the prescribed acts for entry into the national phase before all designated Offices which have not been elected in the demand or in a later election within 19 months from the priority date or could not be elected because they are not bound by Chapter II.						
Name and mailing address of the International Searching Authority	Authorized officer					

European Patent Office, P.B. 5818 Patentlaan 2 NL-2280 HV Rijswijk Tel. (+31-70) 340-2040, Tx. 31 651 epo nl, Fax: (+31-70) 340-3016

Petros Koutsoftas

#### **NOTES TO FORM PCT/ISA/220**

These Notes are intended to give the basic instructions concerning the filing of amendments under article 19. The Notes are based on the requirements of the Patent Cooperation Treaty, the Regulations and the Administrative Instructions under that Treaty. In case of discrepancy between these Notes and those requirements, the latter are applicable. For more detailed information, see also the PCT Applicant's Guide, a publication of WIPO.

In these Notes, "Article", "Rule", and "Section" refer to the provisions of the PCT, the PCT Regulations and the PCT Administrative Instructions, respectively.

## **INSTRUCTIONS CONCERNING AMENDMENTS UNDER ARTICLE 19**

The applicant has, after having received the international search report, one opportunity to amend the claims of the international application. It should however be emphasized that, since all parts of the international application (claims, description and drawings) may be amended during the international preliminary examination procedure, there is usually no need to file amendments of the claims under Article 19 except where, e.g. the applicant wants the latter to be published for the purposes of provisional protection or has another reason for amending the claims before international publication. Furthermore, it should be emphasized that provisional protection is available in some States only.

#### What parts of the international application may be amended?

Under Article 19, only the claims may be amended.

During the international phase, the claims may also be amended (or further amended) under Article 34 before the International Preliminary Examining Authority. The description and drawings may only be amended under Article 34 before the International Examining Authority.

Upon entry into the national phase, all parts of the international application may be amended under Article 28 or, where applicable, Article 41.

#### When?

Within 2 months from the date of transmittal of the international search report or 16 months from the priority date, whichever time limit expires later. It should be noted, however, that the amendments will be considered as having been received on time if they are received by the International Bureau after the expiration of the applicable time limit but before the completion of the technical preparations for international publication (Rule 46.1).

#### Where not to file the amendments?

The amendments may only be filed with the International Bureau and not with the receiving Office or the International Searching Authority (Rule 46.2).

Where a demand for international preliminary examination has been/is filed, see below.

#### How?

Either by cancelling one or more entire claims, by adding one or more new claims or by amending the text of one or more of the claims as filed.

A replacement sheet must be submitted for each sheet of the claims which, on account of an amendment or amendments, differs from the sheet originally filed.

All the claims appearing on a replacement sheet must be numbered in Arabic numerals. Where a claim is cancelled, no renumbering of the other claims is required. In all cases where claims are renumbered, they must be renumbered consecutively (Administrative Instructions, Section 205(b)).

The amendments must be made in the language in which the international application is to be published.

#### What documents must/may accompany the amendments?

Letter (Section 205(b)):

The amendments must be submitted with a letter.

The letter will not be published with the international application and the amended claims. It should not be confused with the "Statement under Article 19(1)" (see below, under "Statement under Article 19(1)").

The letter must be in English or French, at the choice of the applicant. However, if the language of the international application is English, the letter must be in English; if the language of the international application is French, the letter must be in French.

### **NOTES TO FORM PCT/ISA/220 (continued)**

The letter must indicate the differences between the claims as filed and the claims as amended. It must, in particular, indicate, in connection with each claim appearing in the international application (it being understood that identical indications concerning several claims may be grouped), whether

- (i) the claim is unchanged;
- (ii) the claim is cancelled;
- (iii) the claim is new;
- (iv) the claim replaces one or more claims as filed;
- (v) the claim is the result of the division of a claim as filed.

# The following examples illustrate the manner in which amendments must be explained in the accompanying letter:

- [Where originally there were 48 claims and after amendment of some claims there are 51]:
   "Claims 1 to 29, 31, 32, 34, 35, 37 to 48 replaced by amended claims bearing the same numbers;
   claims 30, 33 and 36 unchanged; new claims 49 to 51 added."
- [Where originally there were 15 claims and after amendment of all claims there are 11]: "Claims 1 to 15 replaced by amended claims 1 to 11."
- 3. [Where originally there were 14 claims and the amendments consist in cancelling some claims and in adding new claims]:
  - "Claims 1 to 6 and 14 unchanged; claims 7 to 13 cancelled; new claims 15, 16 and 17 added." or "Claims 7 to 13 cancelled; new claims 15, 16 and 17 added; all other claims unchanged."
- 4. [Where various kinds of amendments are made]: "Claims 1-10 unchanged; claims 11 to 13, 18 and 19 cancelled; claims 14, 15 and 16 replaced by amended claim 14; claim 17 subdivided into amended claims 15, 16 and 17; new claims 20 and 21 added."

#### "Statement under article 19(1)" (Rule 46.4)

The amendments may be accompanied by a statement explaining the amendments and indicating any impact that such amendments might have on the description and the drawings (which cannot be amended under Article 19(1)).

The statement will be published with the international application and the amended claims.

### It must be in the language in which the international application is to be published.

It must be brief, not exceeding 500 words if in English or if translated into English.

It should not be confused with and does not replace the letter indicating the differences between the claims as filed and as amended. It must be filed on a separate sheet and must be identified as such by a heading, preferably by using the words "Statement under Article 19(1)."

It may not contain any disparaging comments on the international search report or the relevance of citations contained in that report. Reference to citations, relevant to a given claim, contained in the international search report may be made only in connection with an amendment of that claim.

### Consequence if a demand for international preliminary examination has already been filed

If, at the time of filing any amendments and any accompanying statement, under Article 19, a demand for international preliminary examination has already been submitted, the applicant must preferably, at the time of filing the amendments (and any statement) with the International Bureau, also file with the International Preliminary Examining Authority a copy of such amendments (and of any statement) and, where required, a translation of such amendments for the procedure before that Authority (see Rules 55.3(a) and 62.2, first sentence). For further information, see the Notes to the demand form (PCT/IPEA/401).

#### Consequence with regard to translation of the international application for entry into the national phase

The applicant's attention is drawn to the fact that, upon entry into the national phase, a translation of the claims as amended under Article 19 may have to be furnished to the designated/elected Offices, instead of, or in addition to, the translation of the claims as filed.

For further details on the requirements of each designated/elected Office, see Volume II of the PCT Applicant's Guide.

International application No. PCT/US 02/04217

Boxi	Observations where certain claims were found unsearchable (Continuation of item 1 of first sheet)
This Inte	ernational Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:
1.	Claims Nos.: because they relate to subject matter not required to be searched by this Authority, namely:
2.	Claims Nos.: because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:
	Claims Nos.: because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).
Box II	Observations where unity of invention is lacking (Continuation of item 2 of first sheet)
This Inter	ernational Searching Authority found multiple inventions in this international application, as follows:
	see additional sheet
1. X	As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2.	As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3	As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4	No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:
Remark c	The additional search fees were accompanied by the applicant's protest.  X  No protest accompanied the payment of additional search fees.

## FURTHER INFORMATION CONTINUED FROM: PCT/ISA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. claims: 1-15

Intensity control of a pixel by use of subpixels and pulse-width modulated waveform  $% \left( 1\right) =\left\{ 1\right\} =\left\{ 1\right\}$ 

2. claims: 16-22

Intensity control of a pixel by use of pulse-width and amplitude modulated waveform  $% \left( 1\right) =\left\{ 1\right\} =\left\{ 1\right\}$ 

International Application No PCT/US 02/04217

A. CLASSI IPC 7	ification of subject matter G09G3/36					
According to International Patent Classification (IPC) or to both national classification and IPC						
	SEARCHED					
Minimum do	ocumentation searched (classification system followed by classification ${ t G09G}$	ion symbols)				
• •	4034					
Documental	tion searched other than minimum documentation to the extent that s	such documents are included in the fields se	earched			
Electronic d	data base consulted during the international search (name of data ba	ase and, where practical, search terms used	)			
EPO-In	ternal, PAJ, WPI Data					
C. DOCUMI	ENTS CONSIDERED TO BE RELEVANT					
Category °	Citation of document, with indication, where appropriate, of the rel	levant passages	Relevant to claim No.			
х	EP 0 714 085 A (FUJITSU GENERAL L	LTD)	1,7			
γ	29 May 1996 (1996-05-29) abstract		6,8-15			
'	column 1, line 8 - line 15		0,0 10			
	column 1, line 44 - line 52	- ^				
ļ	column 2, line 11 - line 16; figu column 2, line 44 - line 53; figu					
	1A,3A,3B					
ļ	column 5, line 6 - line 23; figur	re 6				
]	column 5, line 53 -column 6, line figure 7A	e 23;				
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X Furti	her documents are listed in the continuation of box C.	X Patent family members are listed i	n annex.			
° Special ca	ategories of cited documents:	I to a deciment published after the inter	Propi Allina data			
"A" docume	ent defining the general state of the art which is not	"T" later document published after the inter or priority date and not in conflict with t cited to understand the principle or the	the application but			
consid	dered to be of particular relevance document but published on or after the international	invention				
filing d	"X" document of particular relevance; the claimed invention filing date cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone					
which	ent which may throw doubs on profity claim(s) of is cited to establish the publication date of another n or other special reason (as specified)	"Y" document of particular relevance; the cla	aimed invention			
*O* docume	means received to an oral disclosure, use, exhibition or means	cannot be considered to involve an involve document is combined with one or more ments, such combination being obvious	re other such docu-			
*P* docume	ent published prior to the international filing date but han the priority date claimed	in the art.  *&* document member of the same patent fa				
Date of the	actual completion of the international search	Date of mailing of the international sear	rch report			
4	March 2004	D 3. 04. DA				
Name and n	mailing address of the ISA	Authorized officer				
· .	European Patent Office, P.B. 5818 Patentlaan 2 NL – 2280 HV Rijswijk					
	Tel. (+31-70) 340-2040, Tx. 31 651 epo nl, Fax: (+31-70) 340-3016	Corsi, F				

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Category	
KK (JP)) 17 June 1998 (1998-06-17) abstract page 2, line 16 - line 46 page 3, line 2 - line 15 page 5, line 58 -page 6, line 43; figures 4,5 page 7, line 39 - line 43 page 8, line 27 - line 34  EP 0 685 832 A (SHARP KK) 6 December 1995 (1995-12-06) abstract page 2, line 5 - line 6 page 3, line 8 - line 15 page 9, line 28 -page 10, line 7; figures 11,14  Y US 6 144 364 A (OTAKA NOBUAKI ET AL) 7 November 2000 (2000-11-07) abstract column 27, line 61 -column 29, line 3; figures 39,40 column 34, line 27 -column 35, line 44  Y US 5 861 869 A (CONNER ARLIE R ET AL) 19 January 1999 (1999-01-19) abstract column 7, line 65 -column 9, line 42; figures 3A,3B,5A,5B  Y US 5 124 695 A (GREEN IAN M) 23 June 1992 (1992-06-23) abstract column 1, line 35 - line 45; figure 1 column 3, line 1 - line 11  X,P EP 1 091 342 A (MATSUSHITA ELECTRIC IND CO LTD) 11 April 2001 (2001-04-11) paragraph '0152! - paragraph '0154!; figure 11 paragraph '0149!; figure 10 abstract paragraph '0407! - paragraph '0408!; figure 52	Relevant to claim No.
6 December 1995 (1995-12-06) abstract page 2, line 5 - line 6 page 3, line 8 - line 15 page 9, line 28 -page 10, line 7; figures 11,14  Y US 6 144 364 A (OTAKA NOBUAKI ET AL) 7 November 2000 (2000-11-07) abstract column 27, line 61 -column 29, line 3; figures 39,40 column 34, line 27 -column 35, line 44  Y US 5 861 869 A (CONNER ARLIE R ET AL) 19 January 1999 (1999-01-19) abstract column 7, line 65 -column 9, line 42; figures 3A,3B,5A,5B  Y US 5 124 695 A (GREEN IAN M) 23 June 1992 (1992-06-23) abstract column 1, line 35 - line 45; figure 1 column 3, line 1 - line 11  X,P EP 1 091 342 A (MATSUSHITA ELECTRIC IND CO LTD) 11 April 2001 (2001-04-11) paragraph '0152! - paragraph '0154!; figure 11 paragraph '0149!; figure 10 abstract paragraph '0407! - paragraph '0408!; figure 52	1-15
7 November 2000 (2000-11-07) abstract column 27, line 61 -column 29, line 3; figures 39,40 column 34, line 27 -column 35, line 44  Y US 5 861 869 A (CONNER ARLIE R ET AL) 19 January 1999 (1999-01-19) abstract column 7, line 65 -column 9, line 42; figures 3A,3B,5A,5B  Y US 5 124 695 A (GREEN IAN M) 23 June 1992 (1992-06-23) abstract column 1, line 35 - line 45; figure 1 column 3, line 1 - line 11  X,P EP 1 091 342 A (MATSUSHITA ELECTRIC IND CO LTD) 11 April 2001 (2001-04-11) paragraph '0152! - paragraph '0154!; figure 11 paragraph '0149!; figure 10 abstract paragraph '0407! - paragraph '0408!; figure 52	1-15
19 January 1999 (1999-01-19) abstract column 7, line 65 -column 9, line 42; figures 3A,3B,5A,5B   Y US 5 124 695 A (GREEN IAN M) 23 June 1992 (1992-06-23) abstract column 1, line 35 - line 45; figure 1 column 3, line 1 - line 11  X,P EP 1 091 342 A (MATSUSHITA ELECTRIC IND CO LTD) 11 April 2001 (2001-04-11) paragraph '0152! - paragraph '0154!; figure 11 paragraph '0149!; figure 10 abstract paragraph '0407! - paragraph '0408!; figure 52	8-10, 12-15
23 June 1992 (1992-06-23) abstract column 1, line 35 - line 45; figure 1 column 3, line 1 - line 11  EP 1 091 342 A (MATSUSHITA ELECTRIC IND CO LTD) 11 April 2001 (2001-04-11) paragraph '0152! - paragraph '0154!; figure 11 paragraph '0149!; figure 10 abstract paragraph '0407! - paragraph '0408!; figure 52  ——	10
LTD) 11 April 2001 (2001-04-11) paragraph '0152! - paragraph '0154!; figure 11 paragraph '0149!; figure 10 abstract paragraph '0407! - paragraph '0408!; figure 52	6,11
	1,7

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International Application No PCT/US 02/04217

Category °	lion) DOCUMENTS CONSIDERED TO BE RELEVANT  Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.	
Category	Challon of document, with indication, where appropriate, of the relevant passages	Nelevant to dain No.	
х -	US 6 094 243 A (YASUNISHI NORIO)	16-22	
l	25 July 2000 (2000-07-25)		
	abstract	•	
ļ	column 1, line 54 - line 59		
	column 2, line 21 -column 3, line 8		
	column 3, line 43 - line 51		
	column 6, line 52 - line 63		
	column 7, line 7 - line 11		
	column 10, line 41 - line 56		
	column 11, line 38 -column 12, line 16; figure 1		
	column 14, line 17 -column 15, line 44;		
	table 1		
.	column 16, line 42 - line 48; figure 4		
1	column 18, line 64 -column 19, line 3;	ļ	
	figure 9		
.	——————————————————————————————————————		
	US 5 745 089 A (NISHITANI SHIGEYUKI ET	16,17,	
	AL) 28 April 1998 (1998-04-28)	19-21	
	abstract		
	column 9, line 1 - line 26; figures		
	1,10-12		
	column 16, line 31 -column 17, line 10;		
	figures 13-15		
	PATENT ABSTRACTS OF JAPAN	16-22	
	vol. 017, no. 451 (P-1595),		
	18 August 1993 (1993-08-18)		
	-& JP 05 100630 A (SEMICONDUCTOR ENERGY		
	LAB CO LTD), 23 April 1993 (1993-04-23)		
	abstract		-
, P	-& US 6 215 466 B1 (YAMAZAKI ET AL.)	16-22	
	10 April 2001 (2001-04-10)		
	abstract column 2, line 27 - line 51		
	column 3, line 4 - line 58	·	
	column 7, line 4 - line 6; figures 2,3		
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Information on patent family members

International Application No
PCT/US 02/04217

	ent document n search report		Publication date		Patent family member(s)	Publication date
EP 0	714085	Α	29-05-1996	JP	3139312 B2	26-02-2001
	·			JP	8152863 A	11-06-1996
				AU	701200 B2	21-01-1999
				AU	3798695 A	30-05-1996
				CA	2163155 A1	26-05-1996
	•			EP	0714085 A1	29-05-1996
<u>.</u>				US <sup>.</sup>	6069610 A	30-05-2000
EP 0	848369	Α	17-06-1998	GB	2320357 A	17-06-1998
				EP	0848369 A2	17-06-1998
	•			JP	10260392 A	29-09-1998
				US 	6094187 A	25-07-2000 
EP 0	685832	Α	06-12-1995	DE	69518948 D1	02-11-2000
		•		EP	0685832 A1	06-12-1995
				JP	8050278 A	20-02-1996
				US 	5614924 A	25-03-1997
US 6	3144364	Α	07-11-2000	JP	3322809 B2	09-09-2002
			÷	JP	10031455 A	03-02-1998
				FR	2740253 A1	25-04-1997
			* **	JP	3365630 B2	14-01-2003
٠.				JP	2002278511 A	27-09-2002
				US	2002130826 A1	19-09-2002
				US	6417835 B1	09-07-2002
				US 	2001045923 A1	29-11-2001
US 5	861869	Α	19-01-1999	US	5459495 A	17-10-1995
	•			US	5473338 A	05-12-1995
-				ΑT	155919 T	15-08-1997
				AU	3851193 A	18-11-1993
			•	CA	2095978 A1	15-11-1993
				DE	69312389 D1	04-09-1997
				DE	69312389 T2	29-01-1998
				EP	0569974 A2	18-11-1993
				JP	6089082 A	29-03-1994
			•	US	5642133 A	24-06-1997
				US	5767836 A	16-06-1998
				AU	7103794 A	03-01-1995
· 				WO	9429842 A1 	22-12-1994
US 5	124695	Α .	23-06-1992	AT	88020 T	15-04-1993
				DE	3785282 D1	13-05-1993
	-			DE	3785282 T2	21-10-1993
		•	•	EP	0261898 A2	30-03-1988
	•			ES	2039448 T3	01-10-1993
•			•	JP	6064421 B	22-08-1994
				JP 	63108394 A	13-05-1988
EP 1	091342	Α	11-04-2001	EP	1091342 A2	11-04-2001
	•			JP	2001175216 A	29-06-2001
					473641 B	21-01-2002
US 6	5094243	A	25-07-2000	 JP	9319342 A	12-12-1997
		,		KR	246150 B1	15-03-2000
				US	6229583 B1	08-05-2001
	 745089	 А	28-04-1998	JP	6230752 A	19-08-1994

Information on patent family members

International Application No
PCT/US 02/04217

Patent document cited in search report	Publication date		Patent family member(s)	Publication date
JP 05100630 A	23-04-1993	JP CN KR US	2639764 B2 1072271 A ,B 9603961 B1 6215466 B1	13-08-1997 19-05-1993 25-03-1996 10-04-2001